Claims

1. Pouring spout (1) for a container for liquid, said spout comprising

outer tubular means (2)

inner tubular means (3) with an inner passage (11) to facilitate said liquid from the container to the exterior,

said inner tubular means (3) being partly or totally integrated in said outer tubular means (2) and said means being movable in relation to each other,

c h a r a c t e r i z e d b y

said spout further comprises a stick (4) including closing means (5) at one end for closing or opening said inner passage (11) by movement of said outer or inner tubular means in relation to each other.

2. Pouring spout (1) according to claim 1, c h a r a c t e r i z e d b y said stick (4) including closing means (5) is moved from a first position to one or more further positions in which one or more of said positions are defined.

3. Pouring spout (1) according to claim 1 or 2, c h a r a c t e r i z e d b y said inner tubular means (3) being connected to the container e.g. by entering into an opening of said container or by surrounding a rim of an opening of said container or by being attached to the edge of the rim of said container.

4. Pouring spout (1) according to any of claims 1 to 3, c h a r a c t e r i z e d b y said spout includes a section comprising an opening (8) with a rim for pouring to the exterior, said section being opposite the section comprising an

opening (9) into the interior of the container and said openings (8, 9) each defines a beginning of said inner passage (11).

5. Pouring spout (1) according to claim 4, c h a r a c t e r i z e d b y said closing means (5) closing and opening at one of said two openings (8, 9).

6. Pouring spout (1) according to any of claims 1 to 5, c h a r a c t e r i z e d b y a container connection section (6) comprises sealing means such as O-rings or rims in rubber or rubber-like material.

7. Pouring spout (1) according to any of claims 1 to 6, c h a r a c t e r i z e d b y said stick (4) being connected to said outer or inner tubular means (2, 3) with holding or connection means (12, 13) comprising one or more openings.

8. Pouring spout (1) according to claim 7, c h a r a c t e r i z e d b y said one or more openings in said holding or connection means (12, 13) being part of said inner passage (11).

9. Pouring spout (1) according to any of claims 1 to 8, c h a r a c t e r i z e d b y said stick (4) being positioned in the centre of said inner and/or outer tubular means (2, 3) along a centre line (cl) of said inner and/or outer tubular means (2, 3).

10. Pouring spout (1) according to any of claims 7 to 9, c h a r a c t e r i z e d b y said stick (4) transversally being held in place by holding means (12) extending from the inner surface of said inner tubular means, said holding means (12) allowing the stick (4) to move in the longitudinal direction.

11. Pouring spout (1) according any of claims 1 to 10, c h a r a c t e r i z e d b y said holding means (12) being at least one ring or similar shaped means

connected to said inner surface of said inner tubular means (3) with supporting arms.

12. Pouring spout (1) according any of claims 1 to 11, c h a r a c t e r i z e d b y said outer tubular means (2) being movable in the longitudinal direction in relation to said inner tubular means (3) and by a circular movement around said centre line (cl).

13. Pouring spout (1) according to any of claims 1 to 12, c h a r a c t e r i z e d b y said outer tubular means (2) includes at least one opening defining a movement area (16) of at least one pin (15) connected to the outer surface of said inner tubular means (3).

14. Pouring spout (1) according to any of claims 1 to 12, c h a r a c t e r i z e d b y said inner tubular means (3) includes at least one recess defining a movement area (16) of at least one pin (15) connected to the inner surface of said outer tubular means (2).

15. Pouring spout (1) according to claim 13 or 14, c h a r a c t e r i z e d b y said movement area (16) comprises at least two openings or recesses being perpendicular or parallel to said centre line (cl).

16. Pouring spout (1) according to claim 15, c h a r a c t e r i z e d b y a first and further openings or recesses being perpendicular to each other forming one or more successive S shapes.

17. Pouring spout (1) according to any of claims 14 to 16, c h a r a c t e r i z e d b y said movement area comprising a first and third opening or recess being perpendicular to the centreline (cl) and establishing two defined positions for said stick (4) including closing means (5) e.g. an opened and closed position for said inner passage (11).

18. Pouring spout (1) according to any of claims 14 to 17, characterized by said first and/or third opening or recess comprise at least one bulge (21) securing said at least one pin (15) in one of said defined positions.

19. Pouring spout according to any of claims 7 to 18, characterized by said stick (4) further comprises at least one controlling rod (22, 25) movable held in one or more of said holding or connection means (12, 13) e.g. sliding in holes penetrating said holding or connection means (12, 13).

20. Pouring spout according to claim 19, characterized by said at least one controlling rod (22, 25) being positioned between said stick (4) and the inner surface of said inner tubular means (3) e.g. in sets on opposite side of the stick (4).

21. Pouring spout according to any of claims 1 to 20, characterized by said inner and outer tubular means (2, 3) comprise activating means (18-20, 26, 27) such as spring or magnetic means or combinations of the two.

22. Pouring spout according to claim 21, characterized by said activating means includes spring activating means (20) acting against an interior surface of said inner and outer tubular means (2, 3), or against an interior surface of said inner tubular means and said holding means, or against an interior surface of said tubular means and said connecting means (13).

23. Pouring spout according to claim 21 or 22, characterized by said activating means includes spring activating means (20) acting against at least two surfaces of spout such as

an inner surface of said inner tubular means (2) and an outer surface of said outer tubular means (3),

an outer surface of said inner tubular means (2) and an inner surface of said outer tubular means (3),

an inner surface of said inner tubular means (2) and an upper surface of said outer tubular means (3),

surfaces of said holding means (12) and said connecting means (13),

a surface of said material sensible to magnetic fields (27) and an lower surface of said outer tubular means (3),

or surfaces of said sliding holding means (29) and lip or resting points (30).

24. Pouring spout according to any of claims 21 to 23, c h a r a c t e r i z e d b y said activating means includes magnetic material (18, 19, 26, 27) in connection with said stick (4) and material (18, 19, 26, 27) sensible to magnetic fields in connection with said inner tubular means (3) or vice versa.

25. Pouring spout according to any of claims 21 to 24, c h a r a c t e r i z e d b y said activating means includes magnetic material (18, 19, 26, 27) in connection with said stick (4) and material (18, 19, 26, 27) sensible to magnetic fields in connection with said inner tubular means (3) or vice versa and spring activating means (20) acting against an interior surface of said inner or outer tubular means (2, 3) and a surface of said connection means (13) in order to force said stick (4) including closing means (5) toward a closing position of said inner passage (11).

26. Pouring spout according to any of claims 1 to 25, c h a r a c t e r i z e d b y some or all means of the pouring spout such as said inner and outer tubular means (2, 3) being made in a plastic material or any material capable of being moulded, extruded, milled or similarly modified.

27. Pouring spout according to any of claims 1 to 26, c h a r a c t e r i z e d b y said closing means (5) being made in a rubber material other similarly flexible material.

28. Pouring spout according to any of claims 1 to 27, c h a r a c t e r i z e d b y the surface of said spout comprising an adaptor (7) for holding a normal closing means of the container.

29. Pouring spout according to claim 28, c h a r a c t e r i z e d b y said adaptor (7) comprising a rim and a screw thread corresponding to the cap of the container.

30. Container (10) for containing a liquid being pourable through at least one opening in said container, where said container includes a pouring spout (1) according to any of claims 1 to 29 controlling the pouring of said liquid through said at least one opening.

31. Container (10) according to claim 30, c h a r a c t e r i z e d b y said pouring spout (1) being an integrated part of said container or a separate part mounted on said container.

32. Container (10) according to claim 30 or 31, c h a r a c t e r i z e d b y said pouring spout (1) being a separate part mounted on said container with an adapting means (33) in between the spout and the neck or opening of said container for adapting diameters of said spout and neck or opening.

33. Method of controlling the liquid pouring from a container with a pouring spout, said method comprising the steps of:

moving an outer or inner tubular means of the pouring spout in relation to each other,

and hereby

moving a stick including closing means of the pouring spout from a first position to one or more further positions in which one or more of said positions are defined.

34. Method according to claim 33, where the stick including closing means may be moved between at least the following positions

a first defined position closing the liquid passage of the sprout by said closing means being forced against an opening of the liquid passage,

a second defined position in which the liquid passage of the sprout is open by said closing means being held at a distance from said opening of the passage, and

at least one further position allowing said closing means moving freely between said first and second defined position.

35. Use of a pouring spout according to any of claims 1 to 29 in connection with beverage containers such as bottles containing milk, juice, lemonade, wine, beer or soft drink e.g. drinks comprising carbon dioxide.